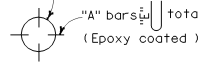


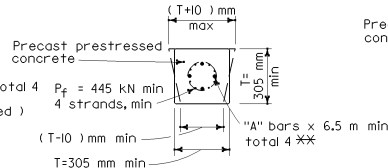
SECTION V-V

Class 400=PP360 x 9.53  
Class 625=PP360 x 11.2



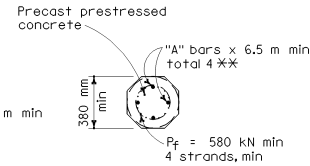
SECTION W-W

PP = Steel pipe pile



SECTION X-X

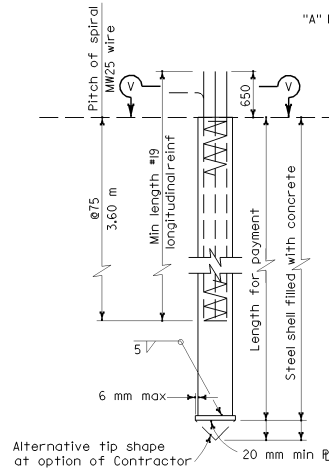
\*\*To be in place when pile is cast



SECTION Y-Y



DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET TOTAL NO. SHEETS
<p><b>David T. Adams</b> REGISTERED CIVIL ENGINEER No. 46476 Exp. 06-30-07 STATE OF CALIFORNIA</p>				
<p>July 1, 2004 PLANS APPROVAL DATE</p>				
<p>The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.</p>				
<p>To get to the Caltrans web site, go to: <a href="http://www.dot.ca.gov">http://www.dot.ca.gov</a></p>				

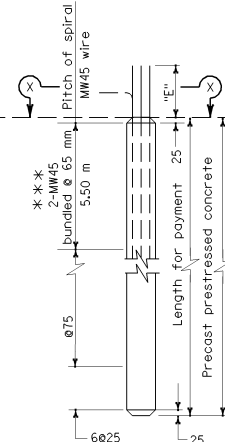


ALTERNATIVE "V"

"A" bars total 4, anchors  
Place radially @ equal spacing around pile

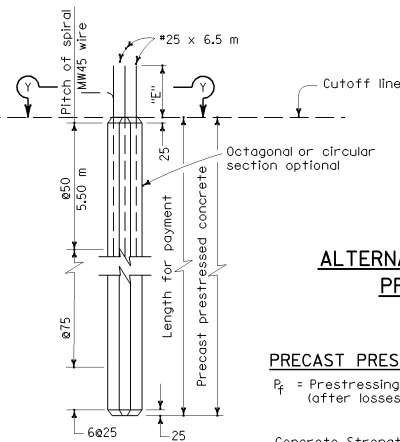
50 mm  $\phi$  holes  
Plug top of pipe with concrete

ALTERNATIVE "W"



ALTERNATIVE "X"

\*\*\*MW 70 at 50 may be substituted



ALTERNATIVE "Y"

## ALTERNATIVE PILE ANCHOR FOR PRESTRESSED PILES

### DESIGN NOTES

#### PRECAST PRESTRESSED PILES

$P_f$  = Prestressing force (after losses) If section used is larger than the minimum section shown, then " $P_f$ " shall provide 5 Mpa minimum.

Concrete Strength:  $f'_c$  @ 28 days= 42 MPa (Alternative "X")  
35 MPa (Alternative "Y")  
 $f'_{ci}$  @ transfer= 28 MPa

#### REINFORCED CONCRETE

$f'_c$  = 28 MPa  
 $f_y$  = 420 Mpa

#### STEEL PIPE PILE

$F_y$  (Minimum yield strength) = 310 Mpa  
 $F_u$  (Minimum tensile strength) = 455 Mpa

#### DESIGN CAPACITY

**Class 400**  
Compression = 400 kN (Service state)  
= 800 kN (Nominal axial strength)  
Tension = 160 kN (Service state)  
= 400 kN (Nominal axial strength)

**Class 625**  
Compression = 625 kN (Service state)  
= 1250 kN (Nominal axial strength)  
Tension = 250 kN (Service state)  
= 625 kN (Nominal axial strength)

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

## PILE DETAILS CLASS 400 AND CLASS 625

NO SCALE

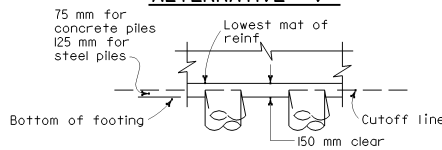
ALL DIMENSIONS ARE IN  
MILLIMETERS UNLESS OTHERWISE SHOWN

**B2-5**

### NOTES

- Details are the same for both Class 400 and Class 625 unless noted otherwise.
- At the Contractor's option, alternative steel pipe with at least the diameter and wall thickness shown on these plans may be used. The diameter shall not exceed 460 mm.
- Pile reinforcement and steel pile anchor bars extending into a footing shall be hooked as required to provide clearance to top of footing. Piles shall be extended only in accordance with details shown elsewhere in these plans.
- Lapped splices in spiral pile reinforcement shall be lapped 80 wire diameters minimum. Spiral pile reinforcement at splices and at ends shall be terminated by a 135° hook with 150 mm tail hooked around a longitudinal bar or strand.
- 50 mm clearance to spiral reinforcement shall be maintained if section used is larger than the minimum section shown.
- Maximum cutoff length at the top of the Alternative "X" and Alternative "Y" Piles is three (3) meters.
- For longitudinal reinforcement and prestressing for anchor piles and load test piles, see "Load Test Pile Details (2)", Standard Plan B2-10.
- Alternative "W" piles shall not be used for corrosive environments.

### PILE EMBEDMENT



Nominal Resistance (Tension)*		
	Not Required	Required
"A" bars	#19	#25
"E" Dimension	650	860

\*See Pile Data Table in the Project Plans for Nominal Resistance (Tension) Requirements